



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,386	04/19/2004	Minoru Soraoka	520.34692V17	9742

20457 7590 10/05/2005

ANTONELLI, TERRY, STOUT & KRAUS, LLP
1300 NORTH SEVENTEENTH STREET
SUITE 1800
ARLINGTON, VA 22209-3873

EXAMINER

BRAHAN, THOMAS J

ART UNIT PAPER NUMBER

3654

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

de

Office Action Summary

Application No.

10/826,386

Applicant(s)

SORAOKA ET AL.

Examiner

Thomas J. Brahan

Art Unit

3652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) 7-11, 13, 15-19 and 28-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 12, 14, 20-27 and 32-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/19/04 & 7/7/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 3652

1. The following is a quotation of the second paragraph of 35 U.S.C. § 112:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which applicant regards as his invention.
2. Claims 4, 5, 20-23, 25-27 and 33-35 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "said dummy sample" lacks antecedent basis within the claims. All the claim recitations in claim 1 regarding the dummy sample functionally discuss the wafer without positively including it into the claimed combination.
3. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103, the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 C.F.R. § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of potential 35 U.S.C. § 102(f) or (g) prior art under 35 U.S.C. § 103.
4. Claims 1-6, 12, 14, 20-27 and 32-35 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Asakawa et al '856 (cited by applicant) in view of Kato et al JP 4-108531 (note see US Patent No 5,349,762, cited by applicant for an English translation) and Maydan et al. Figure 7 of Asakawa et al '586 shows the basic claimed processing apparatus having a cassette table (126), a load lock chamber (130), a first transferring device (122), a transferring chamber (116), a plurality of vacuum processing chambers (110A-C) and support members in the load locks. Asakawa et al varies from the claims by not specifying that the first transferring device (122) is vertically moving, and by not having a lifting support at the first load lock. Kato et al shows a similar processing apparatus with a vertically moving transfer device (13). Maydan et al shows a similar processing apparatus with a vertically moving wafer support (180). It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the wafer processing apparatus of Asakawa et al '586 by having the first transfer device (122) vertically moving, as to have it reaching the various wafers positioned at different heights in the cassettes, as taught by Kato et al. It would further have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to modify the wafer processing apparatus of Asakawa et al '586 by

Art Unit: 3652

having the support in the first load lock vertically moving, as to store wafers during transfer, as taught by Maydan et al. Asakawa et al '586 has a position detecting system for the wafers, see the last eight lines of column eight, as recited in claim 2. The moving support of Maydan et al has plural support members, as recited in claim 3. Re claims 4, 5, 20-27, and 32-35, it would further have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to use a dummy wafer for checking the system for foreign matter and for cleaning, as also taught by Kato et al, see column 9, line 53 through column 10, line 15 of the US Patent. The cassette table of Asakawa et al '586 has a plurality of cassettes (two) on a plane, as recited in claim 6.

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

6. Claims 1-6, 12, 14, 20-27 and 32-35 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-27 of U.S. Patent No. 6,752,579 in view of Kato et al. Claims 1-27 of applicant's earlier patent are drawn to the same apparatus as these claims but do not claim the dummy wafer features. It would have been obvious to one of ordinary skill in the art at the time the invention was made by applicant to use a wafer for checking the system for foreign matter and for cleaning, as taught by Kato et al, see column 9, line 53 through column 10, line 15.

7. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b). A registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

8. An inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Brahan whose telephone number is (571) 272-6921. The examiner's supervisor, Ms. Eileen Lillis, can be reached at (571) 272-6928. The new fax number for all patent applications is (571) 273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is

Art Unit: 3652

available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Questions regarding access to the Private PAIR system, should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Handwritten signature of Thomas J. Brahan and the date 10/2/05.

Thomas J. Brahan
Primary Examiner
Art Unit 3652